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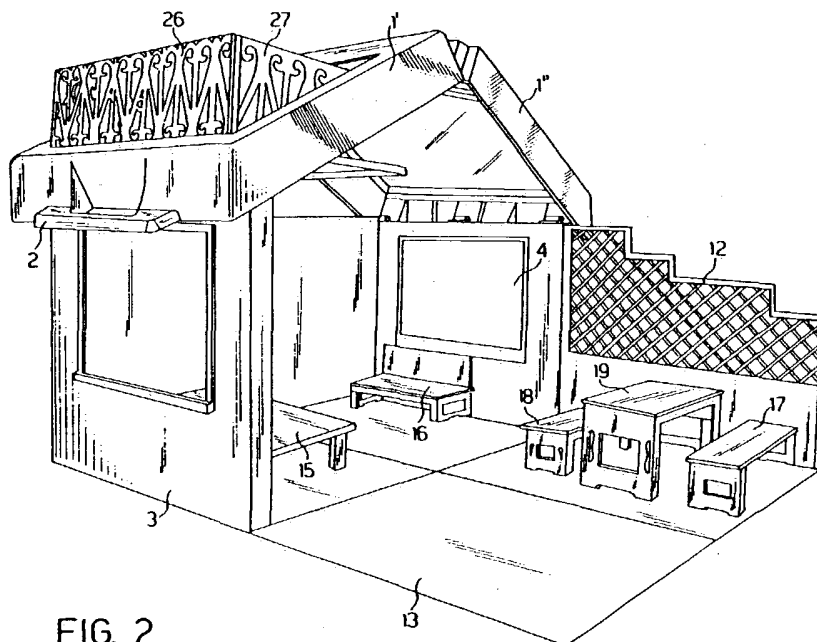
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I-00187 Roma (IT)(54) **Toy-house foldable in the form of a suitcase.**

(57) The invention concerns a toy house foldable in the form of a suitcase (1) which can be assembled simply by turning over its portions (3, 4, 7, 8, 12,

13) preassembled and structured in such a way that it is possible to close them to realize an overnight bag.

**FIG. 2****EP 0 555 188 A1**

The present invention concerns a toy house foldable in the form of a suitcase.

More particularly, the invention consists in having realized a toy house which is assembled simply turning over its preassembled portions and which is structured so that it can be folded in the form of an overnight bag.

As it is well known, several proposals are available on the market concerning toy houses.

Each one of said solutions, in order to provide a product reproducing a situation always more corresponding to the reality, is very much complicated and bulky either when the house is ready to play or when it must be put away.

The assembling operations of the toy houses presently available on the market are very long and difficult, therefore the user tends to mount the house only once, thus letting it always prepared in advance, with the obvious consequent encumbrance, or to mount it less times with respect to the real wishes.

This for example makes also difficult to transport the toy from a room to another one of the same flat or, moreover, to the home of a friend of the baby, since it would be necessary to disassemble the toy house and to transport it, preferably enclosed within the original package, and then to assemble it again.

As it is well evident, all the above operations discourage the baby, limiting her opportunities of playing.

Moreover, it is also known that have been proposed on the market some kinds of toys that can be transformed into a suitcase in order to facilitate their transport.

However, these are toys structured in a very simple way with respect to a toy house, and consequently their transformation into a suitcase is technically far simpler.

A solution of this kind has never been proposed for a toy house just for the technical difficulties met.

In this context, the Applicant has studied and realized a technical solution that allows to transform a bulky object, as it the case of a toy house, along with all its accessories, in a really little and compact suitcase.

In order to approximately give an idea of the reduction of the dimensions obtained by the invention, it can be indicated by way of example that an opened toy house occupying a volume of about 180 dm³ is reduced, when it assumes the form of a suitcase, up to about 18 dm³, with a volume ratio of 10:1.

The above results are obtained according to the invention by a solution that provides only the sequential turnover of specific parts, without the necessity of making any assembling.

It is therefore specific object of the present invention a toy house foldable in the form of a suitcase comprising two suitcase halfparts coupled each other along one side, and each provided on the opposite side of locking means; two inner portions respectively hinged on said side of the halfparts upon which said locking means are provided; two first wall elements, hinged on said two inner portions, on a side adjacent to the side upon which said portions are hinged on said two halfparts, and centrally couplable each other; a floor element, hinged on one of said inner portions on the side opposed to the side of the portion hinged on said halfpart; and a second wall element hinged on one of said inner portions, on the side opposed to the side of the portion where said first wall element is hinged; said two halfparts realizing the roof of the toy house.

In a preferred embodiment of the toy house according to the invention, overturnable furnishings are further provided in said first and second wall elements and/or in said inner portions, so that they can be positioned by a simple overturn operation when the elements of the toy house are opened and disappear when the house must be closed.

Further, according to the invention, said roof element is made up by four parts hinged each other and that can be opened so as to realize a square floor.

Preferably, said two first wall elements are centrally coupled by two hooks.

Moreover, said second wall element is made up of a grid wall.

The two halfparts can be closed by a slidable lock and are provided with a handle to hold the suitcase.

Further, according to the invention, one of the two halfparts is centrally provided with a structure to realize a balcony.

Particularly, said structure comprises a wall rotatable about two support arms, provided on said halfpart and that can be lifted with respect to the same halfpart; a further wall, hinged on one side on said halfpart and provided, on the side opposite to the hinged one, with hooking means for coupling with said wall; and a railing element.

According to the invention, locking and release means could be provided for all the abovementioned overturnable elements constituting the toy house.

The present invention will be now described according to its preferred embodiments, with particular reference to the figures of the drawings, wherein:

figures 1a - 1h sequentially show the assembling steps of the toy house according to the invention, starting from the suitcase position; and

figure 2 is a perspective view of the toy house according to the invention.

Figures from 1a to 1h show the sequence of the different steps to be performed to realize the completely opened toy house, starting from the position of figure 1a, while figure 2 shows the toy house opened and assembled.

The suitcase 1 is provided with a slidable locking system 2.

Opening the said system 2 and resting the back of the suitcase 1 over the table, the two halfparts 1' and 1'' are opened and the two inner vertical portions 3 and 4, hinged on said halfparts 1' and 1'' along the sides 5 and 6 and rotatable according to arrow A, are then rotated.

On the sides 5' and 6' of said inner portions 3 and 4, two walls 7 and 8 are hinged, said walls being centrally coupled each other by hooks 9 after having been rotated according to arrows B.

The house opened as it is shown in figure 1c shall have to be rotated about the axis 10, grasping it in correspondence of point 11.

The grid wall 12 is hinged along the side 6'' of the block 6, said wall rotating according to the direction of the arrow C until it reaches the position shown in figure 1e.

On the other hand, the floor 13 is hinged along the side 5''' of the portion 3, said floor being opened sequentially overturning it according to the arrows D, E, F and G.

The wall 7 provides a partition 14, hinged on the side 7' and opened according to arrow H.

Now, the bed 15, the sofa 16, the benches 17 and 18 and the table 19 can be lowered respectively from the wall 7, from the block 4 and from the grid wall 12.

The rooms of the toy house according to the invention are now completely realized, having been prepared a bed-room, a living-room and a garden completely furnished.

As it is well evident, the two halfparts 1' and 1'' will constitute the roof of the house.

The halfpart 1'' of the suitcase 1 is further prearranged so as to be possible to transform it as a terrace or balcony (see figures 1g and 1h).

The halfpart 1'' is provided with a movable central wall 20 rotating about the support arms 21 and 22.

The motion of the wall 20 according to the direction of the arrow I induce the motion of the wall 23 according to the direction of the arrow L, said wall 23 resting on said wall 20 and being fixed to the hook 24.

Said wall 23 rotates on the halfpart 1'' about the hinges 25.

The partial rotation of the arms 21 and 22 allows the lifting of the wall 20 for a "x" amount, said wall 20 making up the floor of the balcony,

and subsequently the prearrangement of the front and lateral railing 26 and 27.

The carrying out of the same steps in an inverted arrangement allows to fold the toy house, coming back to the suitcase configuration.

The present invention has been described in an illustrative, but not limitative way, according to its preferred embodiments, but it should be understood that changes and/or modifications can be introduced by those skilled in the art without departing from the scope as defined by the appended claims.

Claims

1. Toy house foldable in the form of a suitcase comprising two suitcase halfparts (1', 1'') coupled each other along one side, and each provided, on the opposite side, of locking means (2); two inner portions (3, 4), respectively hinged on said side (5, 6) of the halfparts (1', 1'') upon which said locking means (2) are provided; two first wall elements (7, 8), hinged on said two inner portions (3, 4), on a side (5', 6') adjacent to the side where said blocks (3, 4) are hinged on said two halfparts (1', 1''), and centrally couplable each other; a floor element (13), hinged on one of said inner portions (3, 4), on the side opposed to the side of the portion hinged on said halfpart (1', 1''); and a second wall element (12) hinged on one of said inner portions (3, 4), on the side opposed to the side of the block where said first wall element (7, 8) is hinged; said two halfparts (1', 1'') realizing the roof of the toy house.
2. Toy house according to claim 1, characterized in that overturnable furnitures (15, 16, 17, 18, 19) are further provided on said first and second wall elements (7, 8; 12) and/or on said inner portions (3, 4), so that they can be positioned by a simple overturn operation when the elements of the toy house are opened and disappear when the house must be closed.
3. Toy house according to one of the preceding claims, characterized in that said roof element (13) is made up by four parts hinged each other.
4. Toy house according to one of the preceding claims, characterized in that said two first wall elements (7, 8) are centrally coupled by two hooks (9).
5. Toy house according to one of the preceding claims, characterized in that said second wall element (12) is made up of a grid wall.

6. Toy house according to one of the preceding claims, characterized in that said two halfparts (1', 1'') can be closed by a slidable lock (2) and are provided with a handle. 5
7. Toy house according to one of the preceding claims, characterized in that one of the two halfparts (1', 1'') is centrally provided with a structure (20, 21, 22, 23, 24, 25, 26, 27) to realize a balcony. 10
8. Toy house according to claim 7, characterized in that said structure comprises a wall (20) rotatable about two support arms (21, 22), provided on said halfpart (1', 1'') and that can be lifted with respect to the same halfpart (1', 1''); a further wall (23), hinged on one side on said halfpart (1', 1'') and provided, on the side opposite to the hinged one, with hooking means (24) for coupling with said wall; and a railing element (26, 27). 15 20
9. Toy house according to one of the preceding claims, characterized in that locking and release means are provided for all the above-mentioned overturnable elements constituting the toy house. 25
10. Toy house foldable in the form of a suitcase, according to each one of the preceding claims, substantially as illustrated and described. 30
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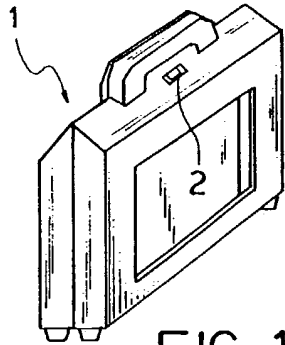


FIG. 1a

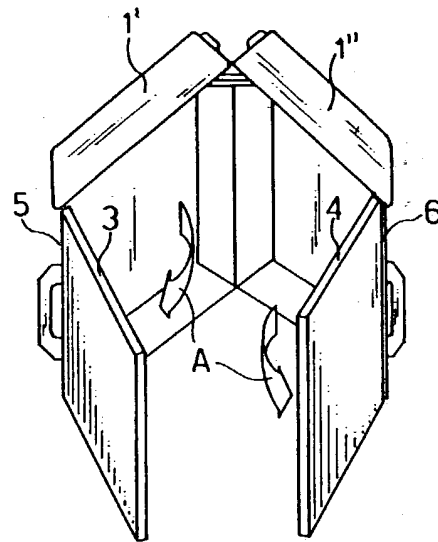


FIG. 1b

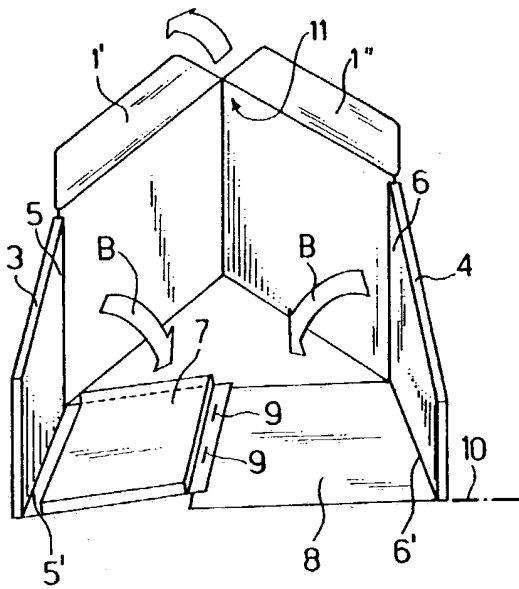


FIG 1c

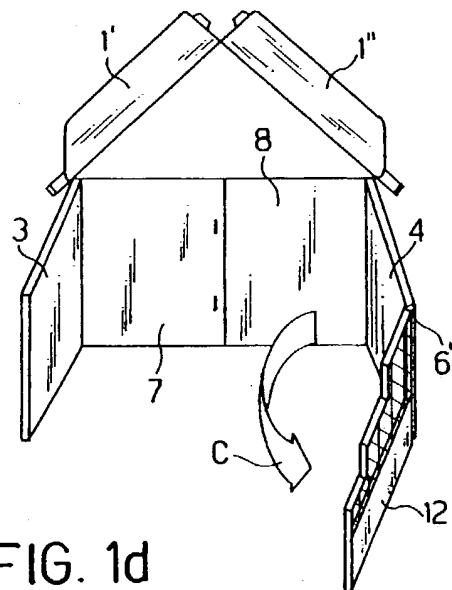


FIG. 1d

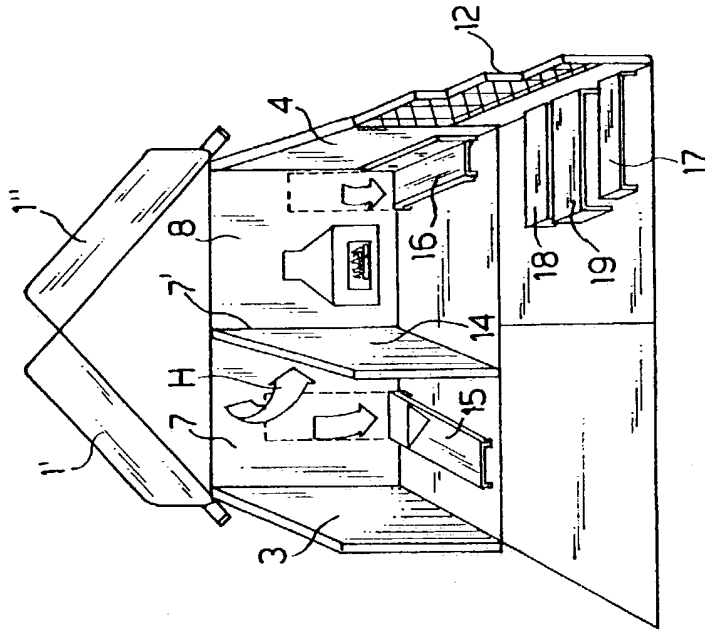


FIG. 1f

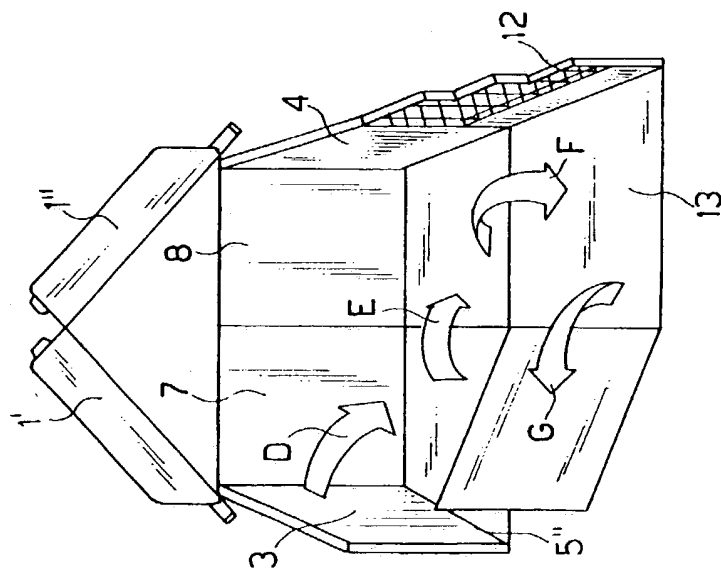


FIG. 1e

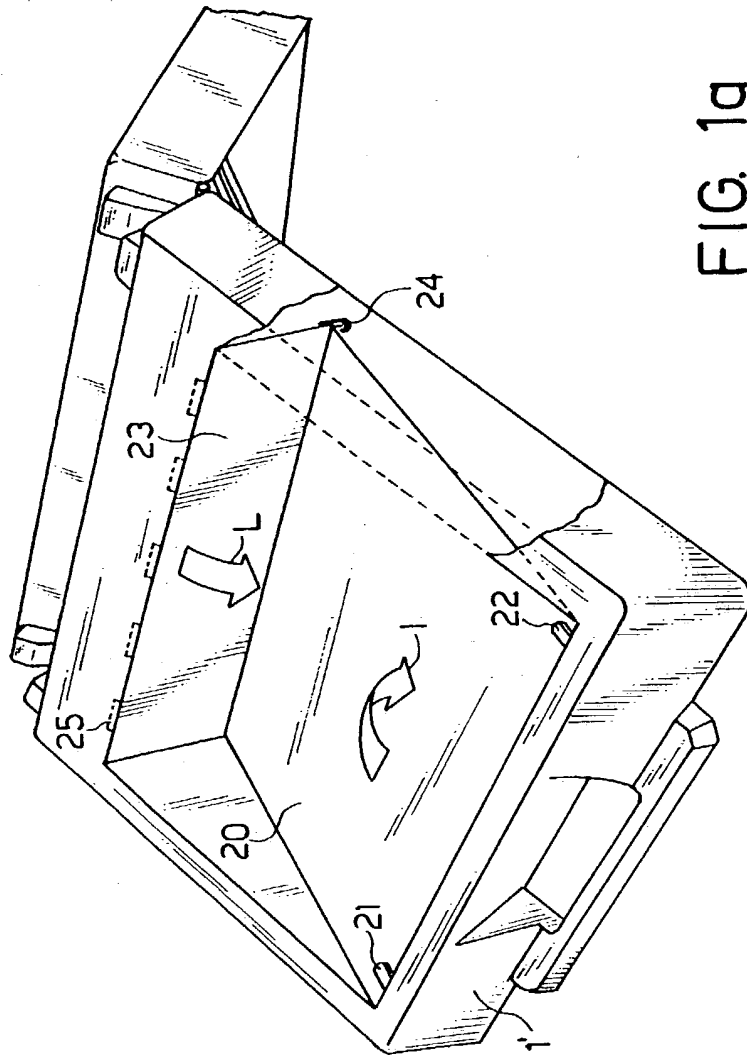


FIG. 19

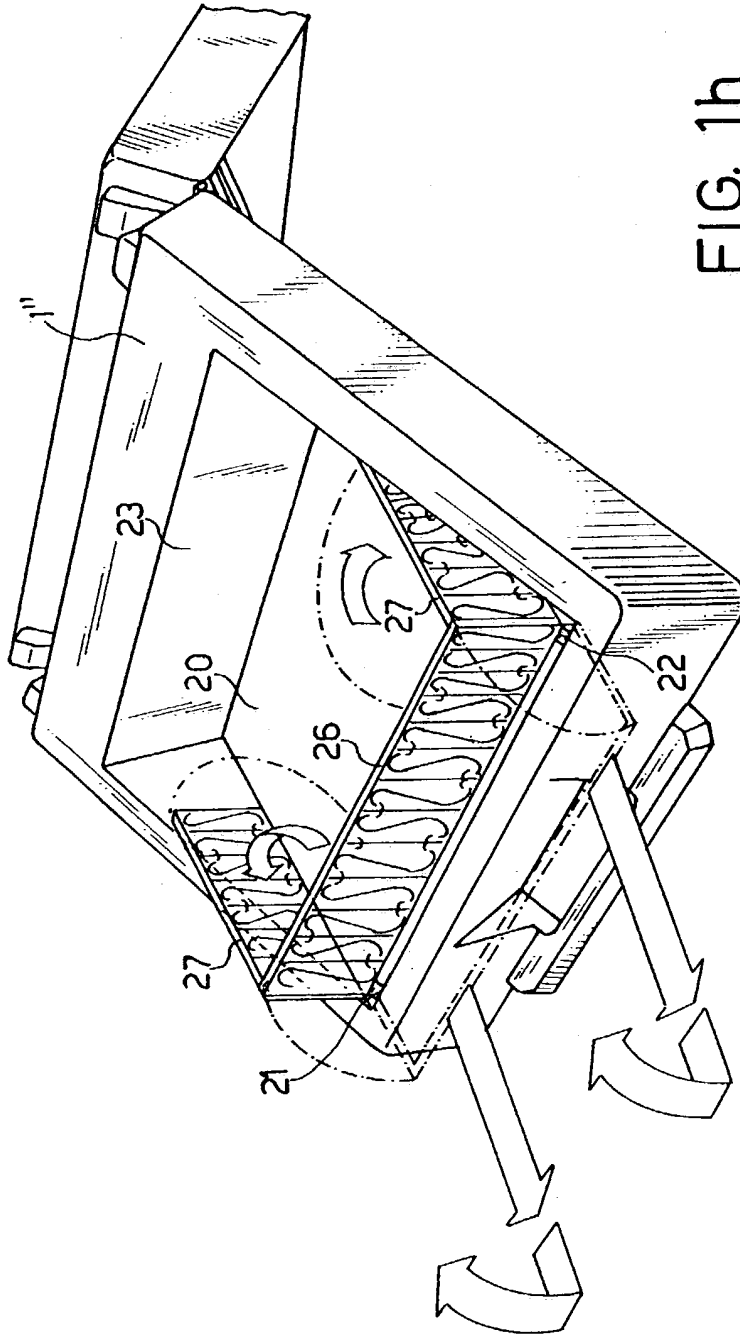


Fig. 14

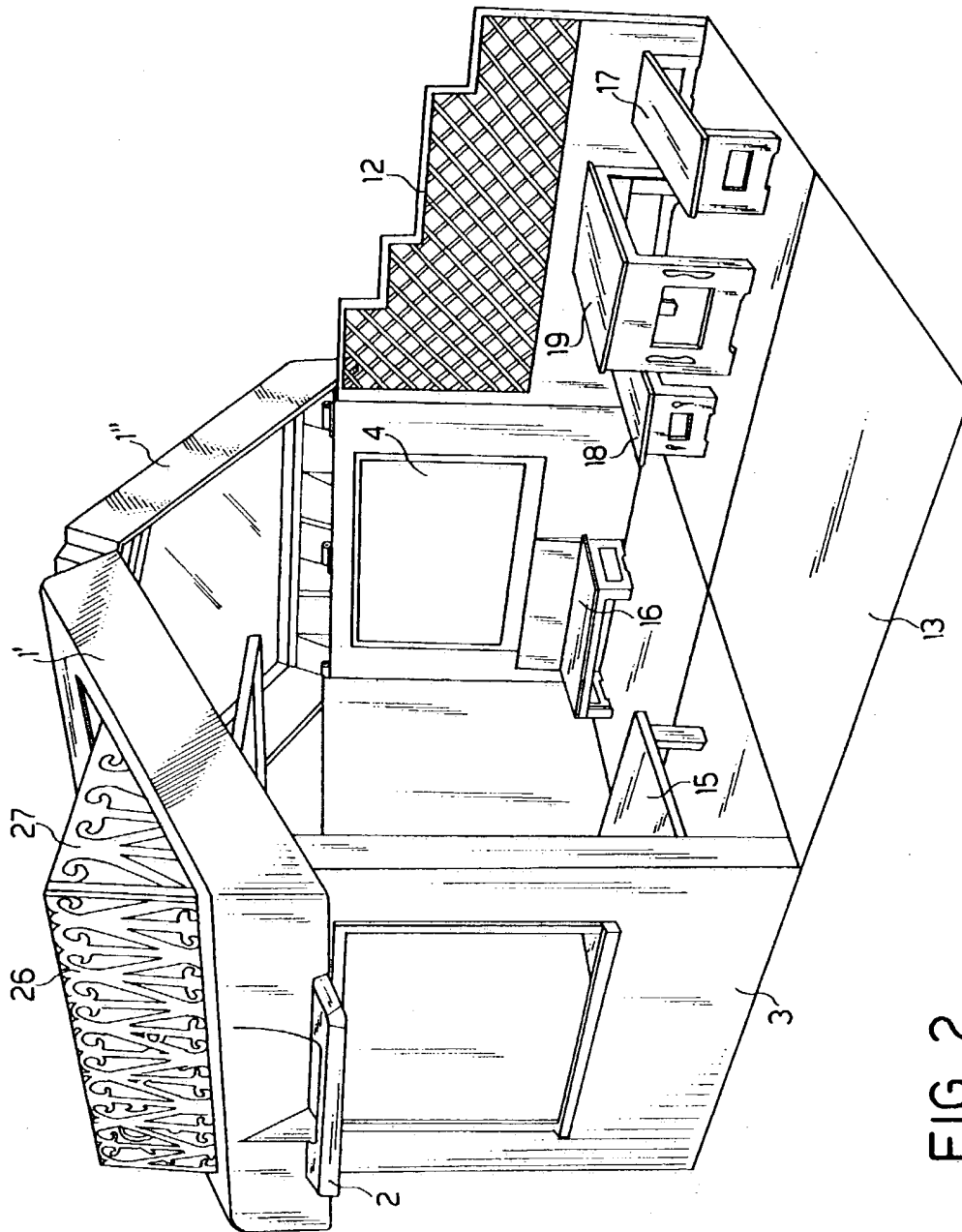


FIG. 2



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EUROPEAN SEARCH REPORT

Application Number

EP 93 83 0030

DOCUMENTS CONSIDERED TO BE RELEVANT			
Category	Citation of document with indication, where appropriate, of relevant passages	Relevant to claim	CLASSIFICATION OF THE APPLICATION (Int. Cl.5)
A	US-A-4 030 235 (TERYIAN) * column 2, line 21 - column 3, line 38; figure 2 *	1,2,6,10	A63H3/52
A	US-A-4 964 249 (PAYNE) * the whole document *	1,4,9,10	
A	GB-A-2 159 425 (KABUSHIKI KAISHA TAKARA) * the whole document *	1,6	
A	US-A-4 070 789 (LEVENSON) * the whole document *	1,3,10	
			TECHNICAL FIELDS SEARCHED (Int. Cl.5)
			A63H
The present search report has been drawn up for all claims			
Place of search THE HAGUE		Date of completion of the search 14 APRIL 1993	Examiner VANRUNXT J.
CATEGORY OF CITED DOCUMENTS			
X : particularly relevant if taken alone Y : particularly relevant if combined with another document of the same category A : technological background O : non-written disclosure P : intermediate document		T : theory or principle underlying the invention E : earlier patent document, but published on, or after the filing date D : document cited in the application L : document cited for other reasons & : member of the same patent family, corresponding document	